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EDUCATION:

1981 Ph. D., Department of Biostatistics, University of North Carolina at

Chapel Hill.

B. S. in Applied Mathematics with High Honor, Georgia Institute of

Technology.

HONORS:

NIEHS Unsung Hero Award.

NIH Merit Award.

1999 Finalist for a Senior University Teaching Excellence Award.

1977-1980 Graduate fellowship on a National Research Service Award.

Membership in the following honor societies:

Phi Eta Sigma, 1974; Phi Kappa Phi, 1976; Pi Mu Epsilon, 1977;

Tau Beta Sigma, 1974; Sigma Xi, 1984.

1973-1977 National Merit Scholarship.

PROFESSIONAL EXPERIENCE:

2003-present Staff Scientist, Biostatistics Branch, National Institute of Environmental

Health Sciences.

1986-2003 Professor (1999-2003), Associate Professor (1990-1999), Assistant

Professor (1986-1990), Department of Mathematical Sciences, Division of

Statistics, University of North Carolina at Greensboro, (Statistics

Coordinator, 1998-2000, 2002-2003.)

2000-2001	Interim Head, Department of Mathematical Sciences, University of North Carolina at Greensboro.
2001-2003	Adjunct Professor, Department of Public Health Education, University of North Carolina at Greensboro.
1996-2002	Adjunct Associate Professor, Department of Anthropology, University of New Mexico.
1992-2002	Adjunct Associate Professor, Department of Biostatistics, University of North Carolina at Chapel Hill.
1990	Visiting Associate Professor, Division of Biostatistics and Epidemiology, Howard University Cancer Center.
1981-1986	Assistant Professor, Department of Biometry and Genetics, Louisiana State University Medical Center, New Orleans.
1980	Health Statistician, National Institute for Occupational Safety and Health.

PROFESSIONAL ACTIVITIES:

2004-present	Member, NIEHS/NTP Scientific Review Group (formerly Review Group 1) for the <i>Report on Carcinogens</i> .
2004-present	Contract Officer's Technical Representative (COTR)/Project Officer,

Contract No. N01-ES-15468, N01-ES-55547, Statistical Analysis and Computational Support for NIEHS Experimental Studies.

2004-present Instructor, Biostatistics Short Course for NIEHS/DIR.

2008-present Member, Clinical Advisory Committee, NIEHS/DIR.

2005-2007 Editorial Board member of the *Journal of the National Medical Association*.

Referee for: Journal of the American Statistical Association, The American Statistician, Archives of Pathology and Laboratory Medicine, Journal of the American Medical Association, Journal of the National Medical Association, Journal of Counseling and Development, Journal of Statistical Education, Environmental Health Perspectives, Regulatory Toxicology and Pharmacology, Human and Experimental Toxicology, American Journal of Epidemiology, Comparative Medicine

REFEREED PUBLICATIONS

2010

Blystone CR, **Kissling GE**, Bishop JB, Chapin RE, Wolfe GW, Foster PMD. Determination of the di-(2-ethylhexyl) phthalate (DEHP) NOAEL reproductive development in the rat: Importance of the retention of extra animals to adulthood. *Toxicological Sciences* 2010; 116:640-646.

Boyd WA, Smith MV, **Kissling GE**, Freedman JH. Medium and high throughput screening of neurotoxicants using *C. elegans*. *Neurotoxicology and Teratology* 2010; 32:68-73.

Chan P-C, Ramot Y, Malarkey DE, Blackshear P, **Kissling GE**, Travlos G, Nyska A. Fourteenweek toxicity study of green tea extract in rats and mice. *Toxicologic Pathology* 2010; in press.

Collins BJ, Stout MD, Levine KE, **Kissling GE**, Fennell T, Pritchard J, Fernando R, Burka LT, Hooth MJ. Exposure to hexavalent chromium resulted in significantly higher tissue chromium burden compared to trivalent chromium following similar oral doses to male F344/N rats and female B6C3F1 mice. *Toxicological Sciences* 2010; 118:368-379.

Ding H, Zhang L, Wu B, Wang Q, Hui R, Wang W, Dackor RT, **Kissling GE**, Zeldin DC, Wang DW. Association of common variants of CYP4A11 and CYP4F2 with stroke in the Chinese Han population. *Pharmacogenetics and Genomics* 2010; 20:187-194.

Ghanayem BI, Bai R, **Kissling GE**, Travlos G, Hoffler U. Diet-induced obesity in male mice is associated with reduced fertility and potentiation of acrylamide-induced reproductive toxicity. *Biology of Reproduction* 2010; 82:96-104.

Hewitt SC, **Kissling GE**, Fieselman K, Jayes F, Gerrish K, Korach KS. Biological and biochemical consequences of complete deletion of exon 3 from the ERα gene. *FASEB Journal* 2010; 24:4660-4667.

Kim Y-S, Harry GJ, Kang HS, Goulding D, Wine R, **Kissling GE**, Liao G, Jetten AM. Altered cerebellar development in TAK1/TR4 null mice is associated with deficits in GLAST(+) glia, alterations in social behavior, motor learning, startle reactivity and microglia. *Cerebellum* 2010; 9:310-323.

Moore AB, Yu L, Swartz CD, Zheng X, Wang L, Castro L, **Kissling GE**, Walmer DK, Robboy SJ, Dixon D. Human uterine leiomyoma-derived fibroblasts stimulate uterine leiomyoma cell proliferation and collagen type I production with activation of RTKs and TGF beta receptor signaling in coculture. *Cell Communication and Signaling* 2010, 8:10.

Nick McElhinney SA, **Kissling GE**, Kunkel TA. Differential correction of lagging strand replication errors made by DNA polymerases alpha and delta. *Proceedings of the National Academy of Sciences* 2010; in press.

Poltoratsky V, Heacock M, **Kissling GE**, Prasad R, Wilson SH. Mutagenesis dependent upon the combination of activation-induced deaminase expression and a double-strand break. *Molecular Immunology* 2010; 48:164-170.

Rana R, Chen Y, Ferguson S, **Kissling GE**, Surapureddi S, Goldstein JA. Hepatocyte nuclear factor 4α regulates rifampicin-mediated induction of CYP2C genes in primary cultures of human hepatocytes. *Drug Metabolism and Disposition* 2010; 38:591-599.

Singh BP, Nyska A, **Kissling GE**, Warren L, Johansson SL, Malarkey DE, Hooth MJ. Urethral carcinoma and hyperplasia in male and female B6C3F1 mice treated with 3,3′,4,4′-tetrachloroazobenzene (TCAB). *Toxicologic Pathology* 2010; 38: 372-381.

Travlos GS, Hard GC, Betz L, **Kissling GE**. Chronic progressive nephropathy in male F344 rats in 90-day toxicity studies: its occurrence, and association with renal tubule tumors in subsequent 2-year bioassays. *Toxicologic Pathology* 2010; in press.

Tubbs JT, **Kissling GE**, Travlos GS, Goulding D, Clark J, King-Herbert AP. The effects of buprenorphine, meloxicam, and flunixin meglumine as post-operative analgesia in mice. *Journal of the American Association for Laboratory Animal Science* 2010; in press.

Whiteside TE, Thigpen JE, **Kissling GE**, Grant MG, Forsythe DB. Endotoxin, coliforms and dust levels in various types of rodent bedding. *Journal of the American Association for Animal Laboratory Science* 2010; 49:184-189.

Witt KL, Malarkey DE, Hobbs CA, Davis J, **Kissling GE**, Caspary W, Travlos G, Recio L. No increases in biomarkers of genetic damage or pathological changes in heart and brain tissues in male rats administered methylphenidate hydrochloride (Ritalin) for 28 days. *Environmental and Molecular Mutagenesis* 2010; 51:80-88.

Yoshizawa K, Walker NJ, **Kissling G**, Jokinen MP, Brix AE, Sells DM, Nyska A., Wyde ME. Thyroid follicular lesions induced by oral treatment for two years with 2,3,7,8-tetrachlorodibenzo-*p*-dioxin and dioxin-like compounds in female Harlan Sprague-Dawley rats. *Toxicologic Pathology* 2010; in press.

Zegre-Cannon C, **Kissling GE**, King-Herbert AP, Blankenship-Paris T. Tramadol analgesia in rats: evaluation of routes of administration and dosages on hot plate and tail flick testing. *Laboratory Animals* 2010; 39:342-351.

2009

Boyd WA, Smith MV, **Kissling GE**, Rice JR, Snyder DW, Portier CJ, Freedman JH. Application of a mathematical model to describe the effects of chlorpyrifos on *Caenorhabditis elegans* development. *PLoS ONE* 2009; 4(9):e7024.

Cullen JM, Brown DL, **Kissling GE**, Foley JF, Rizzo J, Marion PL, Parron VI, French JE. Aflatoxin B1 and/or hepatitis B virus induced tumor spectrum in a genetically-engineered

hepatitis B virus expression and Trp53 haploinsufficient mouse model system for hepatocarcinogenesis. *Toxicological Pathology* 2009; 37:333-342.

Hewitt SC, O'Brien JE, Jameson JL, **Kissling GE**, Korach KS. Selective disruption of ERα DNA binding activity alters uterine biological and gene responsiveness to estradiol and Wnt/β-catenin signaling. *Molecular Endocrinology* 2009; 23:2111-2116.

Jefferson W, Doerge D, Padilla-Banks E, Woodling KA, **Kissling GE**, Newbold R. Oral exposure to genistein, the glycosylated form of genistein, during neonatal life causes adverse effects on the female reproductive system. *Environmental Health Perspectives* 2009; 117:1883-1889.

Kissling GE, Malarkey DE, Vallant MK, Johnson JD, Hejtmancik MR, Herbert RA, Boorman GA. Evaluation of dichloroacetic acid for carcinogenicity in genetically modified Tg.AC and p53 haploinsufficient mice. *Toxicological Sciences* 2009; 107:19-26.

Ramot Y, Nyska A, Lieuallen W, Maly A, Flake G, **Kissling GE**, Brix A, Malarkey DE, Hooth M. Inflammatory and chloracne-like skin lesions in B6C3F1 mice exposed 2 years to tetrachloroazobenzene (TCAB). *Toxicology* 2009; 265:1-9.

Sanders JM, Bucher JR, Peckham JC, **Kissling GE**, Hejtmancik MR, Chhabra RS. Carcinogenesis studies of cresols in rats and mice. *Toxicology* 2009; 257:33-39.

Schindler EM, Hindes A, Gribben EM, Yin Y, **Kissling G**, Owen RJ, Longmore GD, Arthur JSC, Efimova T. p38δ mitogen-activated protein kinase is essential for skin tumor development in mice. *Cancer Research* 2009; 69:4648-4655.

Smith MV, Boyd W, **Kissling GE**, Rice JR, Snyder DW, Freedman JH, Portier CJ. A discrete time model for the analysis of medium-throughput *C. elegans* growth data. *PLoS ONE* 2009; 4(9):e7018.

Stone JE, **Kissling GE**, Lujan SA, Rogozin IB, Stith CM, Burgers PM, Kunkel TA. Low fidelity DNA synthesis by the L979F mutator derivative of *Saccharomyces cerevisiae* DNA polymerase *ζ. Nucleic Acids Research* 2009; 37: 3774-3787.

Stout MD, Nyska A, Collins BJ, Witt KL, **Kissling GE**, Malarkey DE, Chhabra RS, Hooth MJ. Chronic toxicity and carcinogenicity studies of chromium picolinate monohydrate administered in feed to F344/N rats and B6C3F1 mice for 2 years. *Food and Chemical Toxicology* 2009; 47:729-733.

Stout MD, Herbert RA, **Kissling GE**, Collins BJ, Travlos GS, Witt KL, Melnick RL, Malarkey DE, Hooth MJ. Hexavalent chromium is carcinogenic to F344/N rats and B6C3F1 mice after chronic oral exposure. *Environmental Health Perspectives* 2009; 117:716-722.

Yoshizawa K, Brix AE, Sells DM, Jokinen MP, Wyde M, Orzech DP, **Kissling GE**, Walker NJ, Nyska A. Reproductive lesions in female Harlan Sprague-Dawley rats following two-year oral treatment with dioxin and dioxin-like compounds. *Toxicologic Pathology* 2009; 37:921-937.

2008

Chan P-C, Hill GD, **Kissling GE**, Nyska A. Toxicity and carcinogenicity studies of 4-methylimidazole in F344/N rats and B6C3F1 mice. *Archives of Toxicology* 2008; 82:45-53.

Chan P-C, Sills RC, **Kissling GE**, Nyska A, Richter W. Induction of thyroid and liver tumors by chronic exposure to 2-methylimidazole in F344 /N Rats and B6C3F1 Mice. *Archives of Toxicology* 2008; 82:399-412.

Dixon D, Herbert R, **Kissling G**, Brix A, Miller R, Maronpot RR. Summary of chemically induced pulmonary lesions in the National Toxicology Program (NTP) toxicology and carcinogenesis studies. *Toxicologic Pathology* 2008; 36:428-439.

Hard GC, Seely JC, **Kissling GE**, Betz LJ. Spontaneous occurrence of a distinctive renal tubule tumor phenotype in rat carcinogenicity studies conducted by the National Toxicology Program (NTP). *Toxicologic Pathology* 2008; 36:388-396.

Hermon T, Moore A, Yu L, **Kissling G**, Castora F, Dixon D. Estrogen receptor alpha (ERα) phospho-Serine-118 is highly expressed in human uterine leiomyoma compared to matched myometrium. *Virchows Archiv* 2008; 453:557-569.

Jeong Y-C, Walker NJ, Burgin DE, **Kissling G**, Gupta M, Kupper L, Birnbaum LS, Swenberg JA. Accumulation of M₁dG DNA adducts after chronic exposure to PCBs, but not from acute exposure to polychlorinated aromatic hydrocarbons. *Free Radical Biology and Medicine* 2008; 45:585-591.

Longnecker MP, Smith CS, **Kissling GE**, Hoppin JA, Butenhoff JL, Decker E, Ehresman DJ, Ellefson ME, Flaherty J, Gardner MS, Langlois E, LeBlanc A, Lindstrom AB, Reagen WK, Strynar MJ, Studabaker WB. An interlaboratory study of perfluorinated alkyl levels in human plasma. *Environmental Research* 2008; 107:152-159.

Mackwan RR, Carver GC, **Kissling GE**, Drake JW, Grogan DW. The rate and character of spontaneous mutation in *Thermus thermophilus* HB27. *Genetics* 2008; 180:17-25.

Moore AB, Flake GP, Swartz CD, Heartwell G, Cousins D, Haseman JK, **Kissling GE**, Sidawy MK, Dixon D. Influence of race, age and body mass index on the gross pathology of uterine fibroids. *Journal of Reproductive Medicine* 2008; 53:90-96.

Stout MD, Herbert RA, **Kissling GE**, Suárez F, Roycroft JH, Chhabra RS, Bucher JR. Toxicity and carcinogenicity of methyl isobutyl ketone in F344N rats and B6C3F1 mice following 2-year inhalation exposure. *Toxicology*. 2008; 244:209-219.

Stout MD, **Kissling GE**, Suárez FA, Malarkey DE, Herbert RA, Bucher JR. Effect of diet and *Helicobacter hepaticus* infection on the chronic toxicity and carcinogenicity of triethanolamine in B6C3F₁ mice. *Toxicologic Pathology* 2008; 36:783-794.

Witt KL, Shelby MD, Itchon-Ramos N, Faircloth M, **Kissling GE**, Chrisman A, Ravi H, Murli H, Mattison D, Kollins SH. Methylphenidate and amphetamine do not induce cytogenetic damage in lymphocytes of children with ADHD. *Journal of the American Academy of Child and Adolescent Psychiatry* 2008; 47: 1375-1383.

Witt KL, Livanos E, **Kissling GE**, Caspary W, Torous D, Recio L. Comparison of flow cytometry and microscopy-based methods of measuring micronucleated reticulocyte frequencies in rodents treated with nongenotoxic and genotoxic chemicals. *Mutation Research – Genetic Toxicology and Environmental Mutagenesis* 2008; 649:101-113.

Yu L, Saile K, Swartz CD, He H, Zheng X, **Kissling GE**, Di X, Lucas S, Robboy SJ, Dixon D. Differential Expression of Receptor Tyrosine Kinases (RTKs) and IGF-I Pathway Activation in Human Uterine Leiomyomas. *Molecular Medicine* 2008; 14:264-275.

Yucesoy B, Johnson VJ, **Kissling GE**, Fluharty K, Kashon ML, Slaven J, Germolec D, Vallyathan V, Luster MI. Genetic susceptibility to progressive massive fibrosis in coal miners. *European Respiratory Journal* 2008; 31:1177-1182.

Zhang L, Ding H, Yan J, Hui R, Wang W, **Kissling GE**, Zeldin DC, Wang DW. Genetic variation in cytochrome P450 2J2 and soluble expoxide hydrolase and the risk of ischemic stroke in a Chinese cohort. *Pharmacogenetics and Genomics* 2008; 18:45-51.

2007

Bennett WD, Hazucha MJ, Folinsbee LJ, Bromberg PA, **Kissling GE**, London SJ. Acute pulmonary function response to ozone (O₃) in young adults as a function of body mass index (BMI). *Inhalation Toxicology* 2007; 19:1147-1154.

Chan SSL, Santos JH, Meyer JN, Mandavilli BS, Cook Jr. DL, McCash CL, **Kissling G**, van Houten B, Copeland WC, Walker VE, Witt KL, Bishop JB. Mitochondrial toxicity following perinatal exposure of CD-1 mice to AZT, 3TC, or AZT-3TC. *Environmental and Molecular Mutagenesis* 2007; 48: 190-200.

DeLozier TC, **Kissling GE**, Coulter SJ, Dai D, Foley JF, Bradbury JA, Murphy E, Steenbergen C, Zeldin DC, Goldstein JA. Detection of human CYP2C8, CYP2C9 and CYP2J2 in cardiovascular tissues. *Drug Metabolism and Disposition* 2007; 35:682-688.

Doi AM, Hill G, Seely J, Hailey JR, **Kissling G**, Bucher JR. α2u-globulin nephropathy and renal tumors in National Toxicology Program studies. *Toxicologic Pathology* 2007; 35:533-540.

Dunnick JK, **Kissling G**, Gerken DK, Vallant MA, Nyska A. Cardiotoxicity of Ma Huang/caffeine or ephedrine/caffeine in a rodent model system. *Toxicologic Pathology* 2007; 35:657-664.

Golumb E, Houminer E, Dunnick J, **Kissling G**, Borman J, Nyska A, Schwalb H. Occult cardiotoxicity: Subtoxic dosage of bis(2-chloroethoxy)methane impairs cardiac response to simulated ischemic injury. *Toxicologic Pathology* 2007; 35:383-387.

Jiang C, Foley J, Clayton N, **Kissling G**, Jokinen M, Herbert R, Diaz M. Abrogation of lupus nephritis in activation induced deaminase, AID-deficient MRL/lpr mice. *Journal of Immunology* 2007; 178: 7422-7431.

Kissling GE, Dertinger S, Hayashi M, MacGregor JT. Sensitivity of the erythrocyte micronucleus assay: dependence on number of cells scored and inter-animal variability. *Mutation Research – Genetic Toxicology and Environmental Mutagenesis* 2007; 634:235-240.

Melnick RL, Nyska A, Foster PM, Roycroft JH, **Kissling GE**. Toxicity and carcinogenicity of the water disinfection byproduct, dibromoacetic acid, in rats and mice. *Toxicology* 2007; 230: 126-136.

Moore AB, Castro L, Yu L, Zheng X, Di X, Sifre MI, **Kissling GE**, Newbold RR, Bortner CD, Dixon D. Stimulatory and inhibitory effects of genistein on human uterine leiomyoma cell proliferation are influenced by the concentration. *Human Reproduction* 2007; 22:2623-2631.

Morrison JP, Satoh H, Foley J, Horton JL, Dunnick JK, **Kissling GE**, Malarkey DE. N-ethyl N-nitrosourea (ENU)-induced meningiomatosis and meningioma in *p16*^{INK4a}/*p19*^{ARF} tumor suppressor gene deficient mice. *Toxicologic Pathology* 2007; 35:838-845.

Peddada SD, Dinse GE, **Kissling GE**. Incorporating historical control data when comparing tumor incidence rates. *Journal of the American Statistical Association* 2007; 102:1212-1220.

Rhodes MC, Bucher JR, Peckham JC, **Kissling GE**, Hejtmancik MR, Chhabra RC. Carcinogenesis studies of benzophenone in rats and mice. *Food and Chemical Toxicology* 2007; 45:843-851.

Sakamoto AN, Stone JE, **Kissling GE**, McCulloch SD, Pavlov YI, Kunkel TA. Mutator alleles of yeast DNA polymerase zeta. *DNA Repair* 2007; 6:1829-1838.

Thigpen JE, Setchell KD, Padilla-Banks E, Haseman JK, Saunders HE, Caviness GF, **Kissling GE**, Grant MG, Forsythe DB. Variations in phytoestrogen content between different mill dates of the same diet produces significant differences in the time of vaginal opening in CD-1 mice and F344 rats but not in CD Sprague Dawley rats. *Environmental Health Perspectives* 2007; 115:1717-1726.

Trempus CS, Morris RJ, Ehinger M, Elmore A, Bortner CD, Ito M, Cotsarelis G, Nijhof JGW, Peckham J, Flagler N, **Kissling G**, Humble MM, King LC, Adams LD, Desai D, Amin S,

Tennant RW. CD34 expression by hair follicle stem cells is required for skin tumor development in mice. *Cancer Research* 2007; 67:4173-4181.

Witt KL, Cunningham CK, Patterson KB, **Kissling GE**, Dertinger SD, Livingston E, Bishop JB. Elevated frequencies of micronucleated erythrocytes in infants exposed to zidovudine in utero and postpartum to prevent mother-to-child transmission of HIV. *Environmental and Molecular Mutagenesis* 2007; 48: 322-329.

2006

Clayton NP, Yoshizawa K, **Kissling G**, Burka LT, Chan P-C, Nyska A. Immunohistochemical analysis of expressions of hepatic cytochrome P450 in F344 rats following oral treatment with kava extract. *Experimental and Toxicologic Pathology* 2006; 58(4):223-236.

Dumsdorf C, Clark AB, Lin Q, **Kissling GE**, Yuan T, Kunkel TA, McGregor WG, Kucherlapati R. Participation of mouse DNA polymerase t in strand-biased mutagenic bypass of UV photoproducts and suppression of skin cancer. *Proceedings of the National Academy of Sciences* 2006; 103(48):18083-18088.

Dunnick J, Blackshear P, **Kissling G**, Cunningham M, Parker J, Nyska A. Critical pathways in heart function: Bis(2-chloroethoxy)methane-induced heart gene changes in F344 rats. *Toxicologic Pathology* 2006; 34:348-356.

Elangbam CS, Wehe JG, Barton JC, Krull DL, Nyska A, Crabbs T, **Kissling GE**. Evaluation of glycosaminoglycans content and 5-hydroxytryptamine 2B receptor in rat heart valves with spontaneous mitral valvulopathy – A possible exacerbation by *dl*-amphetamine sulfate in F344 rats? *Experimental and Toxicologic Pathology* 2006; 58(2-3): 89-99.

Elliott L, Longnecker MP, **Kissling GE**, London SJ. Volatile organic compounds and pulmonary function in the third national National Health and Nutrition Examination Survey, 1988-1994. *Environmental Health Perspectives* 2006; 114:1210-1214.

Fortune JM, Welch CM, **Kissling GE**, Burgers PMJ, Kunkel TA. RPA and PCNA suppress formation of large deletion errors by yeast DNA polymerase delta. *Nucleic Acids Research* 2006; 34: 4335-4341.

Kissling GE, Bernheim NJ, Hawkins WE, Wolfe MJ, Jokinen MP, Smith CA, Herbert RA, Boorman GA. The utility of the guppy (*Poecilia reticulata*) and medaka (*Oryzias latipes*) in evaluation of chemicals for carcinogenicity. *Toxicological Sciences* 2006; 92:143-156.

Peddada SD and **Kissling GE**. A survival-adjusted quantal-response test for analysis of tumor incidence rates in animal carcinogenicity studies. *Environmental Health Perspectives* 2006; 114:537-541.

Tam NNC, Nyska A, Maronpot RR, **Kissling G**, Lomnitski L, Suttie A, Bakshi S, Bergman M, Grossman S, Ho SM. Differential attenuation of oxidative/nitrosative injuries in early prostatic

neoplastic lesions in TRAMP mice by dietary antioxidants. *The Prostate* 2006; 66:57-69.

Zhong X, Garg P, Stith C, Nick-McElhinny S, **Kissling G**, Burgers P, Kunkel T. The fidelity of DNA synthesis by yeast DNA polymerase zeta alone and with accessory proteins. *Nucleic Acids Research* 2006; 34(17): 4731-4742.

2005

Bebenik A, Carver GT, Kadyrov FA, **Kissling GE**, Drake JW. Processivity clamp gp45 and ssDNA-binding-protein gp32 modulate the fidelity of bacteriophage RB69 DNA polymerase in a sequence-specific manner, sometimes enhancing and sometimes compromising accuracy. *Genetics* 2005; 169:1815-1824.

Chen Y, **Kissling GE**, Negishi M, Goldstein J. The nuclear receptors CAR and PXR cross talk with HNF4α to synergistically activate the human CYP2C9 promoter. *Journal of Pharmacology and Experimental Therapeutics* 2005; 314:1125-1133.

Drake JW, Bebenek A, **Kissling GE**, Peddada S. Mutational clusters from transient hypermutability. *Proceedings of the National Academy of Sciences* 2005; 102:12849-12854.

Emmen JMA, Couse JF, Elmore SA, Yates MM, **Kissling GE**, Korach KS. *In vitro* growth and ovulation of follicles from ovaries of estrogen receptor (ER) α and ER β null mice indicate a role for ER β in follicular maturation. *Endocrinology*, 2005; 146(6):2817-2826.

Gal P, **Kissling G**, Young W, Dunaway K, Marsh VA, Jones SM, Shockley DH, Weaver NL, Carlos R, Ransom JL. Efficacy of sucrose to reduce pain in premature infants during eye examinations for retinopathy of prematurity. *Annals of Pharmacotherapy* 2005; 39:1029-1033.

Ghanayem BI, Witt KL, **Kissling GE**, Tice RR, Recio L. Absence of acrylamide-induced genotoxicity in CYP2E1-null mice: Evidence consistent with a glycidamide-mediated effect. *Mutation Research* 2005; 578:284-297.

Ghanayem BI, Witt KL, El-Hadri L, Hoffler U, **Kissling GE**, Shelby MD, Bishop JB. Comparison of germ cell mutagenicity in male CYP2E1-null and wild-type mice treated with acrylamide: evidence supporting a glycidamide-mediated effect. *Biology of Reproduction* 2005; 72:157-163.

Marsh VA, Young W, Dunaway K, **Kissling G**, Carlos RQ, Jones SM, Shockley DH, Weaver NL, Ransom JL, Gal P. Efficacy of topical anesthetics to reduce pain in premature infants during eye examinations for retinopathy of prematurity. *Annals of Pharmacotherapy* 2005; 39:829-833.

Nyska A, Yoshizawa K, Jokinen MP, Brix AE, Sells DM, Wyde ME, Orzech DP, **Kissling GE**, Walker NJ. Olfactory epithelial metaplasia and hyperplasia in female Harlan Sprague-Dawley rats following chronic treatment with polychlorinated biphenyls. *Toxicologic Pathology* 2005; 33(3):371-377.

Yoshizawa K, **Kissling GE**, Johnson JA, Clayton NP, Flagler ND, Nyska A. Chemical-induced atrial thrombosis in NTP rodent studies: potential mechanisms and literature review. *Toxicologic Pathology* 2005; 33:517-532.

2004

Nwosu VC, **Kissling GE**, Trempus CS, Honeycutt H, French JE. Exposure of Tg.AC transgenic mice to benzene suppresses hematopoietic progenitor cells and alters gene expression in critical signaling pathways. *Toxicology and Applied Pharmacology* 2004; 196(1):37-46.

Salo PM, Xia J, Johnson CA, Li Y, **Kissling GE**, Avol EL, Liu C, London SJ. Respiratory symptoms in relation to residential coal burning and environmental tobacco smoke among early adolescents in Wuhan, China: a cross-sectional study. *Environmental Health* 2004; 3:14.

Prior to employment at NIEHS

Cassill N, Williamson N, **Kissling G**, Odinokov D. Import market potential, import market competitiveness and add/drop foreign market decisions of US exporters of sewing machines. *Journal of Competitiveness Review* 2005; 15(1):57-71.

Nelson-Gray RO, Huprich SK, **Kissling GE**, Ketchum K. A preliminary examination of Beck's cognitive theory of personality disorders in undergraduate analogues. *Personality and Individual Differences* 2004; 36:219-233.

Miller CK, Russell T, **Kissling G**. Decision-making patterns for dietary supplement purchases among women ages 25-45 years. *Journal of the American Dietetic Association* 2003; 103(11):1523-1526.

Miller CK, Edwards L, **Kissling G**, Sanville L. Evaluation of a theory-based nutrition intervention for older adults with diabetes mellitus. *Journal of the American Dietetic Association* 2002; 102(8):1069-1081.

Miller CK, Edwards L, **Kissling G**, Sanville L. Nutrition education improves metabolic outcomes among older adults with diabetes mellitus: Results from a randomized controlled trial. *Preventive Medicine* 2002; 34(2):252-259.

Beeson SA, **Kissling GE**. Predicting success for baccalaureate graduates on the NCLEX-RN#2. *Journal of Professional Nursing* 2001; 17(3):121-127.

Brodie BR, Stuckey TD, Hansen C, **Kissling G**, Muncy D. Influence of vessel size on early and late outcomes after primary angioplasty for acute myocardial infarction. *Journal of Invasive Cardiology* 2000; 12(1):13-19.

Cykert S, **Kissling G**, Hansen CJ. Patient preferences regarding possible outcomes of lung resection: What outcomes should preoperative evaluations target? *Chest* 2000; 117:1551-1559.

Gegick CG, Altheimer MD, **Kissling GE**. Benefits of outcome analysis in diabetes management. *Endocrine Practice* 2000; 6(3):253-259.

Cykert S, Joines JD, **Kissling G**, Hansen CJ. Racial differences in patients' perceptions of debilitated health states. *Journal of General Internal Medicine* 1999; 14:217-222.

Williamson NC, **Kissling G**, Levinson C, Mangaldas S. Linking export competitiveness and import market targeting. *Journal of Global Competitiveness* 1999; 7(1):174-186.

Brodie BR, Stuckey TD, Wall TC, **Kissling G**, Hansen CJ, Muncy DB, Weintraub RA, Kelly TA, Berry JJ, DeFranco AC. Importance of time to reperfusion for 30 day and late survival and recovery of left ventricular function after primary angioplasty for acute myocardial infarction. *Journal of the American College of Cardiology* 1998; 32(5):1312-1319.

Rubino CM, Shaffer CL, Gal P, Ransom JL, **Kissling GE**. Postnatal pharmacologic prevention of intraventricular hemorrhage: Meta-analysis of phenobarbital and indomethacin. *Pediatric Nursing* 1997; 23(2):196-204.

Brodie BR, Stuckey TD, **Kissling G**, Hansen CJ, Weintraub RA, Kelly TA. Importance of infarct-related artery patency for recovery of left ventricular function and late survival after primary angioplasty for acute myocardial infarction. *Journal of the American College of Cardiology* 1996; 28(2):319-325.

Williamson NC, Lucas SR, Miles BE, **Kissling GE**. Protectionist American businesspeople and their firms. *Management International Review* 1996; 36(2):167-182.

Cykert S, **Kissling G**, Layson R, Hansen C. Health insurance does not guarantee access to primary care: A national study of physicians' acceptance of publicly insured patients. *Journal of General Internal Medicine* 1995; 10:345-348.

Jud GD, Winkler DT, **Kissling GE**. Price spreads and residential housing market liquidity. *The Journal of Real Estate Finance and Economics* 1995; 11:251-260.

Sandford MK and **Kissling GE**. Multivariate analysis of elemental hair concentrations from a medieval Nubian population. *American Journal of Physical Anthropology* 1994; 95:41-52.

Laing AE, Demenais FM, Williams R, **Kissling GE**, Chen V, Bonney GE. Breast cancer risk factors in African American women: The Howard University Tumor Registry experience. *Journal of the National Medical Association* 1993; 85(12):931-939.

McCarthy P, **Kissling G**, Dirkers J. How many people need substance abuse treatment in North Carolina and how much does it cost? *North Carolina Medical Journal* 1993; 54(5):209-212.

Williams R, Laing E, Demenais F, **Kissling G**, Gause B, Chen V, Bonney G, Descriptive analysis of breast cancer in African-American women at Howard University Hospital, 1960-1987. *Journal of the National Medical Association* 1993; 85(11):828-834.

Sandford MK, **Kissling GE**, Joubert PE. Neural tube defect etiology: New evidence concerning maternal hyperthermia, health and diet. *Developmental Medicine and Child Neurology* 1992; 34:661-675.

Hall L, Vacc NA, **Kissling G**. Likelihood to use employee assistance programs: The effects of socio-demographic, social-psychological, socio-cultural, organizational, and community factors. *Journal of Employment Counseling* 1991; 28(2):63-73.

Miller Jr. JM, **Kissling GE**, Brown HL, Nagel PM, Korndorffer III FA, Gabert HA. *In utero* growth of the large-for-menstrual-age fetus. *Journal of Clinical Ultrasound* 1989; 17:15-17.

Tracy RE, **Kissling GE**, Oalmann MC. Two variants of coronary atherosclerosis in six populations. *American Journal of Public Health* 1989; 79(5):575-581.

Tracy RE, **Kissling GE**, Gandia M, Reynolds C. Spatial dispersion of stainable lipid in frozen sections of human aorta. *Virchows Archiv A* 1989; 415:39-49.

Wolf TM, Elston RC, **Kissling GE**. Relationship of hassles, uplifts, and life events to psychological well-being of freshman medical students. *Behavioral Medicine* 1989; 15(1):37-45.

Edwards JC, Euans DW, **Kissling GE**. Changes in student attitudes toward Family Medicine: A four-year study. *Family Medicine* 1988; 20(3):211-214.

Edwards JC, **Kissling GE**, Brannan JR, Plauché WC, Marier RL. Study of teaching residents how to teach. *Journal of Medical Education* 1988; 63:603-610.

Edwards JC, **Kissling GE**, Plauché WC, Marier RL. Evaluation of a teaching skills improvement programme for residents. *Medical Education* 1988; 22:514-517.

Miller Jr. JM, Brown HL, **Kissling GE**, Gabert HA. The relationship of placental grade to fetal size and growth at term. *American Journal of Perinatology* 1988; 5(1):19-21.

Miller Jr. JM, **Kissling GE**, Brown HL, Korndorffer III FA, Gabert HA. Estimated fetal weight: Applicability to small- and large-for-gestational-age fetuses. *Journal of Clinical Ultrasound* 1988; 16:95-97.

Tracy RE and **Kissling GE**. Comparisons of human populations for histologic features of atherosclerosis: A summary of questions and methods for geographic studies. *Archives of Pathology and Laboratory Medicine* 1988; 112:1056-1065.

Brown HL, Miller Jr. JM, Gabert HA, **Kissling G**. Ultrasonic recognition of the small-forgestation-age fetus. *Obstetrics and Gynecology* 1987; 69(4):631-635.

Carter JM, Gebhardt BM, **Kissling GE**, Kaufman HE. The suppression of acute corneal inflammation by Bredinin. *Journal of Ocular Pharmacology* 1987; 3(3):191-197.

Colin J, Chastel C, Kaufman HE, **Kissling GE**. Combination therapy for dendritic keratitis with Acyclovir and Vidarabine. *Journal of Ocular Pharmacology* 1987; 3:39-42.

Limberg MB, McCaa C, **Kissling GE**, Kaufman HE. Topical application of hyaluronic acid and chondroitin sulfate in the treatment of dry eyes. *American Journal of Ophthalmology* 1987; 103(2):194-197.

McDonald MB, Safir A, Waring GO, Schlichtemeier WR, **Kissling GE**, Kaufman HE. A preliminary study of epikeratophakia or penetrating keratoplasty for keratoconus. *American Journal of Ophthalmology* 1987; 103:467.

Miller Jr. JM, Korndorffer III FA, **Kissling GE**, Brown HL, Gabert HA. Recognition of the overgrown fetus: *In utero* ponderal indices. *American Journal of Perinatology* 1987; 4(2):86-89.

Tracy RE, **Kissling GE**, Malcom GT, Devaney K. Sequestration hypothesis of atherosclerosis. *Virchows Archiv A* 1987; 411:425-434.

Tracy RE and **Kissling GE**. Age and fibroplasia as preconditions for atheronecrosis in human coronary arteries. *Archives of Pathology and Laboratory Medicine* 1987; 111:957-963.

Tracy RE, **Kissling GE**, Curtis MB. Smooth muscle cell-reticulin lamellar units of 13.2 μm thickness composing the aortic intima. *Virchows Archiv A* 1987; 411:415-424.

Wolf TM, **Kissling GE**, Burgess LA. Hassles and uplifts during the freshman year of medical school. *Psychological Reports - Perceptual and Motor Skills* 1987; 60:85-86.

Yazdani M, **Kissling GE**, Tran TH, Gottschalk SK, Laurent Jr. J, Schuth CR. Phenobarbital increases the theophylline requirement of premature infants being treated for apnea. *American Journal of Diseases of Children* 1987; 141:97-99.

Bonney GE and **Kissling GE**. Gram-Schmidt orthogonalization of multinormal variates: Applications in genetics. *Biometrical Journal* 1986; 28:417-425.

Edwards JC, **Kissling GE**, Plauché WC, Marier RL. Long-term evaluation of resident training in clinical teaching skills. *Journal of Medical Education* 1986; 61:967-970.

Miller Jr. JM, **Kissling GE**, Korndorffer III FA, Brown HL, Gabert HA. A cross-sectional study of *in utero* growth of the above-average-sized fetus. *American Journal of Obstetrics and Gynecology* 1986; 155(5):1052-1055.

Tracy RE, **Kissling GE**, Lopez CR, Gandia M. Histometric components of aortic atherosclerosis which vary or remain constant among eight populations. *Laboratory Investigation* 1986; 54(3):314-321.

Tracy RE, Devaney K, **Kissling G**. Characteristics of the plaque under a coronary thrombus. 1986 Yearbook of Pathology and Clinical Pathology 1986; p. 84-86.

Wolf TM, **Kissling GE** and Burgess LA. Change in Type A behavior among medical students: A four-year longitudinal study. *Medical Education* 1986; 20(3):176-180.

Wolf TM, **Kissling GE**, Burgess LA. Lifestyle characteristics during medical school: A four-year cross-sectional study. *Psychological Reports - Perceptual and Motor Skills* 1986; 59:179-189.

Edwards JC, Euans DW, **Kissling GE**. Measuring attitude toward family medicine. *Family Medicine* 1985; vol. XVII(1):4-7.

Hamano H, Kitano J, Mitsunaga S, Kojima S, **Kissling GE**. Adverse effects of contact lens wear in a large Japanese population. *The CLAO Journal* 1985; 11(2):141-147.

Kandarakis A, Johnson TD, Ziegler LP, **Kissling GE**, Zimmerman TJ, Alpern L. The effect of nitrates on intraocular pressure in Sturge-Weber Syndrome. *Glaucoma* 1985; 7(3):120-126.

Kaufman HE, Varnell ED, Centifanto YM, **Kissling GE**. Effect of the herpes simplex virus genome on the response of infection to corticosteroids. *American Journal of Ophthalmology* 1985; 100(1):114-118.

Tracy RE, Devaney K, **Kissling G**. Characteristics of the plaque under a coronary thrombus. *Virchows Archiv, Pathol. Anat.* 1985; 405:411-427.

Tracy RE, **Kissling GE**, Devaney KO, Lopez CR, Gandia M. Spatial dispersion of spindle cells in the human thoracic aorta. *Laboratory Investigation* 1985; 52(1):85-92.

Tracy RE and **Kissling GE**. Age and fibroplasia as pre-conditions for atheronecrosis in the human thoracic aorta. *Archives of Pathology and Laboratory Medicine* 1985; 109:651-658.

Bonney GE and **Kissling GE**. On the inverse of a patterned covariance matrix. *Journal of the American Statistical Association* 1984; 79(387):722-723.

Sanitato JJ, Asbell PA, Varnell ED, **Kissling GE**, Kaufman HE. Acyclovir in the treatment of herpetic stromal disease. *American Journal of Ophthalmology* 1984; 98:537-547.

Wolf TM and **Kissling GE**. Changes in lifestyle characteristics, health, and mood of freshman medical students. *Journal of Medical Education* 1984; 59:806-814.

Yamaguchi T, Asbell PA, Ostrick M, Safir A, **Kissling G**, Kaufman HE. Endothelial damage in monkeys after anterior radial keratotomy performed with a diamond blade. *Archives of Ophthalmology* 1984; 102:765-769.

Yamaguchi T, Asbell PA, Ostrick M, **Kissling GE**, Safir A, Kaufman HE. Corticosteroid therapy after anterior radial keratotomy in primates. *American Journal of Ophthalmology* 1984; 97:215-220.

Kaufman HE, Varnell ED, Centifanto-Fitzgerald YM, De Clercq E, **Kissling GE**. Oral antiviral drugs in experimental herpes simplex keratitis. *Antimicrobial Agents and Chemotherapy* 1983; 24(6):888-891.

Tracy RE, Toca VT, **Kissling GE**, Lopez C. Fibrous intimal thickening and atheronecrosis of the thoracic aorta: Some background for a mathematical theory. *Laboratory Investigation* 1983; 48(3):303-312.

Tracy RE, Toca VT, Lopez CR, **Kissling GE**, Devaney K. Fibrous intimal thickening and atheronecrosis of the thoracic aorta in coronary heart disease. *Laboratory Investigation* 1983; 48(3):313-322.

Tracy RE, **Kissling GE**, Devaney KO, Lopez CR, Toca VT, Gandia M. The spatial dispersion of foam cells in the human thoracic aorta. *Laboratory Investigation* 1983; 49(6):693-701.

Wolf TM and **Kissling GE**. Type A behavior and achievement of freshman medical students. *Journal of Medical Education* 1983; 58:820-822.

BOOK CHAPTERS

Brunssen SH, Moy SS, **Kissling GE**. Behavioral principles and phenotyping of mice: Developmental and adult life stages. Chapter 12 (p. 283-308) in *Neurotoxicology*, 3rd edition, (Harry and Tilson, eds.) 2010.

Kissling GE. Statistical methods. Chapter 14 in *The Clinical Chemistry of Laboratory Animals*, 2010, revised and resubmitted.

Melnick RL and **Kissling GE**. Evaluation of human cancer risk from animal studies. Book chapter. In E. Melnick and B. Everitt (eds.) *Encyclopedia of Quantitative Risk Analysis and Assessment*. New York, John Wiley & Sons 2008.

Prior to employment at NIEHS

Weaver DS, Sandford MK, Bogdan G, **Kissling GE**, Powell ML. Prehistoric treponematosis on the North Carolina coast. In: Powell ML and Cook DC, eds. *The Myth of Syphilis: The Natural History of Treponematosis in North America*. Gainesville, Florida: University Press of Florida, 2005; 77-91.

Sandford MK, Bogdan G, Weaver DS, **Kissling GE**, Powell ML. Prehistoric treponematosis at the Tutu Site: the U.S. Virgin Islands. In: Powell ML and Cook DC, eds. *The Myth of Syphilis: The Natural History of Treponematosis in North America*. Gainesville, Florida: University Press of Florida, 2005; 402-417.

Sandford MK, Bogdan G, **Kissling GE**. Biological adaptation in the prehistoric Caribbean: Osteology and bioarchaeology of the Tutu site. In: Righter E, ed. *Human Adaptations at the Tutu Archaeological Village Site: A Multidisciplinary Case Study*. New York: Gordon and Breach Science Publishers, 2002; 209-229.

Sandford MK and **Kissling GE**. Chemical analyses of human hair: Anthropological applications. In: Sandford MK, ed. *Investigations of Ancient Tissues: Chemical Analyses in Anthropology*, New York: Gordon and Breach Science Publishers. 1993; 131-166.

Edwards JC, **Kissling GE**, Plauché WC, Marier RL. Developing and evaluating a teaching improvement program for residents. In: Edwards JC and Marier RL, eds. *Clinical Teaching for Medical Residents: Roles, Techniques, and Programs*. New York: Springer Publishing Company, 1987.

TECHNICAL REPORTS¹

2010

National Toxicology Program (2010). Toxicology and carcinogenesis studies of dibromoacetonitrile in F344/N rats and B6C3F₁ mice (drinking water studies). Technical Report Series No. 544. NIH Publication No. 10-5886. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2010). Toxicology and carcinogenesis studies of isoeugenol in F344/N rats and B6C3F₁ mice (gavage studies). Technical Report Series No. 551. NIH Publication No. 10-5892. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2010). Toxicology and carcinogenesis studies of 5-(hydroxymethyl)-2-furfural in F344/N rats and B6C3F₁ mice (gavage studies). Technical Report Series No. 554. NIH Publication No. 10-5895. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2010). Toxicology and carcinogenesis studies of 1,2-dibromo-2,4-dicyanobutane in F344/N rats and B6C3F₁ mice (dermal studies). Technical Report Series No. 555. NIH Publication No. 10-5896. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

¹ I contributed to the NTP technical reports as part of a team.

National Toxicology Program (2010). Toxicology and carcinogenesis studies of chromium picolinate monohydrate in F344/N rats and B6C3F₁ mice (feed studies). Technical Report Series No. 556. NIH Publication No. 10-5897. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2010). Toxicology and carcinogenesis studies of androstenedione in F344/N rats and B6C3F₁ mice (gavage studies). Technical Report Series No. 560. NIH Publication No. 10-5901. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2010). Toxicology and carcinogenesis studies of goldenseal root powder (*Hydrastis canadensis*) in F344/N rats and B6C3F₁ mice (feed studies). Technical Report Series No. 562. NIH Publication No. 10-5903. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

2009

National Toxicology Program (2009). Toxicology and carcinogenesis studies of cumene in F344/N rats and B6C3F1 mice (inhalation studies). Technical Report Series No. 542. NIH Publication No. 09-5885. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009). Toxicology and carcinogenesis studies of bromochloroacetic acid in F344/N rats and B6C3F₁ mice (drinking water studies). Technical Report Series No. 549. NIH Publication No. 09-5890. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft²). Toxicology and carcinogenesis studies of bis(2-chloroethoxy)methane in F344/N rats and B6C3F₁ mice (dermal studies). Technical Report Series No. 536. NIH Publication No. 10-5904. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of β -myrcene in F344/N rats and B6C3F₁ mice (gavage studies). Technical Report Series No. 557. NIH Publication No. 09-5898. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of 3,3',4,4'-tetrachloroazobenzene (TCAB) in Harlan Sprague-Dawley rats and B6C3F₁ mice (gavage studies). Technical Report Series No. 558. NIH Publication No. 09-5899. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of 2,3',4,4',5-pentachlorobiphenyl (PCB 118) in female Harlan Sprague-Dawley rats (gavage

18

² Draft reports have been reviewed and approved by the NTP Board of Scientific Counselors

studies). Technical Report Series No. 559. NIH Publication No. 09-5900. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of tetralin in F344/N rats and B6C3F₁ mice and a toxicology study of tetralin in male NBR rats (inhalation studies). Technical Report Series No. 561. NIH Publication No. 09-5902. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of pulegone in F344/N rats and B6C3F₁ mice (gavage studies). Technical Report Series No. 563. NIH Publication No. 10-5905. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of 1-bromopropane in F344/N rats and B6C3F₁ mice (inhalation studies). Technical Report Series No. 564. NIH Publication No. 10-5906. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of milk thistle extract in F344/N rats and B6C3F₁ mice (feed studies). Technical Report Series No. 565. NIH Publication No. 10-5907. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of diethylamine in F344/N rats and B6C3F₁ mice (inhalation studies). Technical Report Series No. 566. NIH Publication No. 10-5908. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2009, draft). Toxicology and carcinogenesis studies of ginseng in F344/N rats and B6C3F₁ mice (gavage studies). Technical Report Series No. 567. NIH Publication No. 10-5909. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

2008

National Toxicology Program (2008). Toxicity studies of Wy-14,643 administered in feed to Sprague-Dawley rats, B6C3F₁ mice and Syrian hamsters. TOX 62. NIH Publication No. 08-4419. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2008, draft). Toxicity studies of estragole administered by gavage to F344/N rats and B6C3F₁ mice. TOX 82. NIH Publication No. 08-5966. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2008). Toxicology and carcinogenesis studies of methylene blue trihydrate in F344/N rats and B6C3F1 mice (gavage studies). Technical Report Series No. 540. NIH Publication No. 08-4429. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2008). Toxicology and carcinogenesis studies of formamide in F344/N rats and B6C3F1 mice (gavage studies). Technical Report Series No. 541. NIH Publication No. 08-5884. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2008). Toxicology and carcinogenesis studies of sodium dichromate dihydrate in F344/N rats and B6C3F1 mice (drinking water studies). Technical Report Series No. 546. NIH Publication No. 08-5887. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2008). Toxicology and carcinogenesis studies of cresols in F344/N rats and B6C3F1 mice (feed studies). Technical Report Series No. 550. NIH Publication No. 08-5891. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2008). Toxicology and carcinogenesis studies of propargyl alcohol in F344/N rats and B6C3F1 mice (inhalation studies). Technical Report Series No. 552. NIH Publication No. 08-5893. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2008). Toxicology studies of allyl bromide in genetically modified (FVB Tg.AC hemizygous) mice and carcinogenicity studies of allyl bromide in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (gavage studies). GMM Series No. 7. NIH Publication No. 08-4424. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

2007

National Toxicology Program (2007). Toxicity studies of sodium dichromate dihydrate administered in drinking water to male and female F344/N rats and B6C3F₁ mice and male BALB/c and *am3*-C57BL/6 mice. TOX 72. NIH Publication No. 07-5964. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicity studies of dimethylaminopropyl chloride, hydrochloride administered by gavage to F344/N rats and B6C3 F_1 mice. TOX 75. NIH Publication No. 07-5965. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology and carcinogenesis studies of diisopropylcarbodiimide in F344/N rats and B6C3F1 mice (dermal studies). Technical Report Series No. 523. NIH Publication No. 07-4473. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology and carcinogenesis studies of 4-methylimidazole in F344/N rats and B6C3F1 mice (feed studies). Technical Report Series No. 535. NIH Publication No. 07-4471. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology and carcinogenesis studies of dibromoacetic acid in F344/N rats and B6C3F1 mice (drinking water studies). Technical Report Series No. 537. NIH Publication No. 07-4475. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology and carcinogenesis studies of methyl isobutyl ketone in F344/N rats and B6C3F1 mice (inhalation studies). Technical Report Series No. 538. NIH Publication No. 07-4476. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology and carcinogenesis studies of α-methylstyrene in F344/N rats and B6C3F1 mice (inhalation studies). Technical Report Series No. 543. NIH Publication No. 08-4474. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology studies of bromodichloromethane in genetically modified (FVB Tg.AC hemizygous) mice (dermal, drinking water, and gavage studies) and carcinogenicity studies of bromodichloromethane in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (drinking water and gavage studies). GMM Series No. 5. NIH Publication No. 07-4422. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology studies of sodium bromate in genetically modified (FVB Tg.AC hemizygous) mice (dermal and drinking water studies) and carcinogenicity studies of sodium bromate in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (drinking water studies). GMM Series No. 6. NIH Publication No. 07-4423. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology and carcinogenesis study of benzene in genetically modified haploinsufficient p16^{Ink4a}/p19^{Arf} mice (gavage studies). GMM Series No. 8. NIH Publication No. 08-4425. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology studies of dicyclohexylcarbodiimide in F344/N rats, B6C3F1 mice, and genetically modified (FVB Tg.AC hemizygous) mice and

carcinogenicity study of dicyclohexylcarbodiimide in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (dermal studies). GMM Series No. 9. NIH Publication No. 07-4426. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology studies of diisopropylcarbodiimide in genetically modified (FVB Tg.AC hemizygous) mice and carcinogenicity studies of diisopropylcarbodiimide in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (dermal studies). GMM Series No. 10. NIH Publication No. 07-4427. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology studies of dichloroacetic acid in genetically modified (FVB Tg.AC hemizygous) mice (dermal and drinking water studies) and carcinogenicity studies of dichloroacetic acid in genetically modified [B6.129-*Trp*53^{tm1Brd}(N5) haploinsufficient] mice (drinking water studies). GMM Series No. 11. NIH Publication No. 07-4428. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology and carcinogenesis study of phenolphthalein in genetically modified haploinsufficient p16^{INK4a}/p19^{Arf} mice (feed study). GMM Series No. 12. NIH Publication No. 07-5961. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2007). Toxicology and carcinogenesis study of glycidol in genetically modified haploinsufficient p16^{INK4a}/p19^{Arf} mice (gavage study). GMM Series No. 13. NIH Publication No. 08-5962. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

2006

National Toxicology Program (2006). Toxicology and carcinogenesis studies of transplacental AZT in Swiss (CD-1) mice (*in utero* studies). Technical Report Series No. 522. NIH Publication No. 06-4458. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of 2,2',4,4',5,5'-hexachlorobiphenyl (PCB 153) in female Harlan Sprague-Dawley rate (gavage studies). Technical Report Series No. 529. NIH Publication No. 06-4465. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of a binary mixture of 3,3',4,4',5-pentachlorobiphenyl (PCB 126) and 2,2',4,4',5,5'-hexachlorobiphenyl (PCB 153) in female Harlan Sprague-Dawley rate (gavage studies). Technical Report Series No.

530. NIH Publication No. 06-4466. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of a binary mixture of 3,3',4,4',5-pentachlorobiphenyl (PCB 126) and 2,3',4,4',5-pentachlorobiphenyl (PCB 118) in female Harlan Sprague-Dawley rate (gavage studies). Technical Report Series No. 531. NIH Publication No. 07-4467. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of bromodichloromethane in male F344/N rats and female B6C3F₁ mice (drinking water studies). Technical Report Series No. 532. NIH Publication No. 06-4468. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of benzophenone in F344/N rats and B6C3F₁ mice (feed studies). Technical Report Series No. 533. NIH Publication No. 06-4469. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2006). Toxicology and carcinogenesis studies of divinylbenzene-HP in F344/N rats and B6C3F1 mice (inhalation studies). Technical Report Series No. 534. NIH Publication No. 07-4470. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

2005

National Toxicology Program (2005). Toxicology and carcinogenesis studies of sodium chlorate in F344/N rats and B6C3F₁ mice (drinking water studies). Technical Report Series No. 517. NIH Publication No. 06-4457. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

National Toxicology Program (2005). Toxicology and carcinogenesis studies of 2,2-bis(bromomethyl)-1,3-propanediol, nitromethane, and 1,2,3-trichloropropane in guppies (*Poecilia reticulate*) and medaka (*Oryzias latipes*). Technical Report Series No. 528. NIH Publication No. 06-4464. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Research Triangle Park, NC.

Prior to employment at NIEHS

Sandford MK, Bogdan G, **Kissling GE**. A view to the past: An investigation of the bioarchaeology and paleopathology at the Tutu Site, St. Thomas, United States Virgin Islands. Site report submitted to the Senior Archaeologist, Government of the Virgin Islands, St. Thomas, 1997.

Kissling GE. A generalized model for the analysis of nonindependent events, *Institute of Statistics Mimeo Series* No. 1357, Chapel Hill, North Carolina, 1981.

LETTERS TO THE EDITOR

Collins BJ, Stout MD, Levine KE, **Kissling GE**, Melnick RL, Abdo K, Pritchard JB, Walden R, Fernando RA, Burka LT, Hooth MJ. Hexavalent chromium in drinking water, Reply. [Reply to Letter to the Editor]. *Toxicological Sciences* 2010; in press.

Kissling GE, Portier CJ, Huff J. MtBE and cancer in animals: Statistical issues with poly-3 survival adjustments for lifetime studies. [Letter to the Editor]. *Regulatory Toxicology and Pharmacology* 2008; 50:428-429.

Prior to employment at NIEHS

Brodie BR, **Kissling G**. Relationship between delay in performing direct coronary angioplasty and early clinical outcome in patients with acute myocardial infarction. [Letter to the Editor]. *Circulation* 2000; 102(4):E29-30.

NONREFEREED PAPERS

Kissling GE, Dertinger S, Hayashi M, MacGregor JT. Sensitivity of the erythrocyte micronucleus assay: dependence on number of cells scored and inter-animal variability. White paper for the International Conference on Harmonisation. 2007.

Prior to employment at NIEHS

Love WP, **Kissling GE**, Kilgariff L. Teaching limits of functions in college calculus classes. *Abstractions* 1988; p.5.

Edwards JC, Marier RL, **Kissling GE**. Improving clinical teaching for residents: Workshops and seminars. *Professions Education Researcher Notes* 1985; 7(2):3-4.

INVITED PRESENTATIONS

* Presenter

Kissling GE*. Statistical analysis for short and long term carcinogenicity studies. Invited talk, continuing education course at the American College of Toxicology 31st annual meeting, Baltimore, MD, November 7, 2010.

Peddada S, Dinse GE, **Kissling GE***. Use of historical controls in survival-adjusted quantal response tests for comparing tumor incidence rates. Invited talk, ENAR Biometric Society meeting, Austin TX, March 20-23, 2005.

Kissling GE*. Statistical methods for NTP 2-year bioassays: Past, present and future. Invited talk, CL Davis Foundation meeting, Nutley, NJ, November 11, 2005.

Prior to employment at NIEHS

Lea SM*, **Kissling GE**, O'Dell TJ, Lybanon M. Water depth determination from wave crest images. Invited paper, International Symposium on Intelligent Signal Processing and Communication Systems, Nashville, TN, November 20-21, 2001. Published in *Proceedings of IEEE Symposium on Intelligent Signal Processing and Communication Systems*, S. Suthaharan and B. Qui, eds., 219 – 223, 2001.

Sandford MK* and **Kissling GE**. The chemistry of mummified hair: New approaches to interpretation. Invited paper, Symposium on Medicine and Diet: The Mummy's Perspective, II World Congress on Mummy Studies, Cartegena, Colombia, February 6 - 10, 1995. Abstract in *II World Congress on Mummy Studies II Congreso Internacional de Estudios Sobre Momias Book of Abstracts*, session 6.13.

Sandford MK*, Bogdan G, **Kissling GE**, Weaver DS. Treponematosis in the prehistoric Caribbean, North Carolina coast and Kentucky: Diagnostic considerations. Invited paper, Sixtyseventh annual meeting of the American Association of Physical Anthropologists, Salt Lake City, UT, March 31 - April 4, 1998. Abstract in the *American Journal of Physical Anthropology*, *Supplement 26*, 1998, p. 194.

Weaver DS*, Sandford MK, Bogdan G, **Kissling GE**. Treponematosis in the prehistoric Caribbean, North Carolina coast and Kentucky: Paleoepidemiological and evolutionary perspectives. Invited paper, Sixty-seventh annual meeting of the American Association of Physical Anthropologists, Salt Lake City, UT, March 31 - April 4, 1998. Abstract in the *American Journal of Physical Anthropology, Supplement 26*, 1998, p. 227.

Sandford MK* and **Kissling GE**. Advances in analysis of mummified hair samples, Invited presentation, Symposium on Ancient Mummies and Modern Medical Technology at the 1994 annual meeting of the Paleopathology Association, Denver, CO, April 30, 1994.

Kissling GE*. Hands-on projects in a college-level statistics course. Invited talk, Central Region Mathematics Conference of the North Carolina Council of Teachers of Mathematics, Durham, North Carolina, March 5, 1993.

Kissling GE*, Hostetter SC*, Riley KK*. Multiplying women in mathematics: Interventions, incentives and resources. Invited roundtable discussion, American Statistical Association Meeting, San Francisco, California, August 8 - 12, 1993. Abstract in the *1993 Proceedings of the Social Statistics Section of ASA*, p. 112-117.

Sandford MK* and **Kissling GE***. Out of the ashes: Future directions for elemental analyses through multivariate statistics. Invited paper, Canadian Association for Physical Anthropology Meeting, St. John's Newfoundland, Canada, October 21 - 23, 1993.

Sandford MK* and **Kissling GE**. Neural tube defects in Acadiana: Biological anthropology and epidemiologic research. Invited talk, American Association of Physical Anthropologists Annual Meeting, Las Vegas, Nevada, April 4, 1992. Abstract in *American Journal of Physical Anthropology, Supplement 14* (1992) p. 145.

Kissling GE*. A growth curve model for observations made at arbitrary times. Invited talk, Department of Experimental Statistics, Louisiana State University, Baton Rouge, Louisiana, March 1986.

Burggraf V* and **Kissling GE***. Discharge planning in nursing homes. Invited talk, Sigma Theta Tau, New Orleans, Louisiana, February 1985.

Kissling GE*. Using statistical consultants. Invited talk, Graduate Nursing Program, School of Nursing, LSUMC, New Orleans, Louisiana, May 1985.

ADDITIONAL NIEHS COMMITTEES

2009	Member, Bioinformatics Search Committee, Laboratory of Neurobiology.
2008	Member, Bioinformatics Search Committee, Biostatistics Branch.
2007-present	Member, Committee on Promotions II
2004-2006	Member, Quality Council.